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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,021	01/31/2001	Steven J. Laken	01107.00088	2264

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EXAMINER

CHAKRABARTI, ARUN K

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 04/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,021

Applicant(s)

Laken

Examiner

Arun Chakrabarti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 25, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-30 is/are pending in the application.
- 4a) Of the above, claim(s) 29 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jan 31, 2001 is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 0303
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action

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DETAILED ACTION

Election/Restriction

1. Applicant's election of Group I, corresponding to claims 27-28, submitted on January 23, 2003, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 27-28 are rejected under 35 U.S.C. 102 (a) as being anticipated by Hodgson et al. (PCT International Publication Number WO 98/38326) (September 3, 1998).

This rejection is based on the fact that any molecule including DNA is suitable for analysis by mass spectrometry. Moreover, it is well known in the art, as disclosed by Monforte et al. (U.S. Patent 5,965,363) (October 12, 1999) (Figures 1-15), that short segments of DNA produced by Type IIS restriction endonuclease (the same enzyme used by the claimed invention as disclosed in the specification) are suitable for mass spectrometry.

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Hodgson et al teach a method for producing a short segment of DNA comprising the steps of:

a) amplifying cDNA or genomic DNA of a subject using a pair of primers to form amplified DNA (Page 14, lines 22-23, Figure 2, and Page 18, lines 12-13), wherein each primer of the pair comprises a linear oligonucleotide comprising a 5' end and a 3' end, the oligonucleotide consisting of at least 35 nucleotides, wherein a first portion of the oligonucleotide of at least 13 nucleotides at the 5' end of the oligonucleotide and a second portion of the oligonucleotide of from 5 to 22 nucleotides at the 3' end of the oligonucleotide are precisely, and/or substantially complementary to a first portion and a second portion of a cDNA or genomic DNA, wherein 4-8 nucleotides between the first portion and the second portion of the oligonucleotide comprise a recognition site for a restriction endonuclease that cleaves at least 5 nucleotides from its recognition site (Pages 38-39, PCR primers having SEQ ID Nos: 31-34, 37-38, and 41-42), wherein the segment of the cDNA or genomic DNA does not comprise the recognition site for the restriction endonuclease, wherein each primer of the pair of primers is complementary to an opposite strand of a double stranded cDNA or genomic DNA molecule, wherein the pair of primers is complementary to two non-contiguous portions of the double stranded cDNA or genomic DNA molecule, wherein 1 to 20 nucleotides separate the two non-contiguous portions of the double stranded cDNA or genomic DNA molecule (Figures 1-2, and Pages 38-39, PCR primers having SEQ ID Nos: 31-34, 37-38, and 41-42);

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b) digesting the amplified DNA with the restriction endonuclease to form a short segment of DNA (Figure 2a-c, and Page 18, lines 13-30).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun Chakrabarti, Ph.D. whose telephone number is (703) 306-5818.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (703) 308-1119.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group analyst Chantae Dessau whose telephone number is (703) 605-1237.

Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission via the P.T.O. Fax Center located in Crystal Mall 1. The CM1 Fax Center numbers for Technology Center 1600 are either (703) 305-3014 or (703) 308-4242. Please note that the faxing of such papers must conform with the Notice to Comply published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Arun Chakrabarti
Patent Examiner
Art Unit 1634

Arun K. Chakrabarti
ARUN K. CHAKRABARTI
PATENT EXAMINER

April 4, 2003